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ABSTRACT

Project SPEED provides instruction in English as a second language (ESL) and native language arts in addition to bilingual instruction in mathematics, social studies, computer skills, and typing to 490 students of limited English proficiency (LEP) in grades 9 through 12. All program students were born outside the United States and their native languages included Spanish, Arabic, Chinese, Vietnamese, and Khmer. Over 59 percent of the students were overage for their grade. To achieve a major goal of dropout prevention, instruction stresses development of English language skills. The aim is to prepare students for mainstreaming within two years by planning individualized programs for each student, and having classes taught by both mainstream and resource teachers to heterogeneous or homogeneous language groups. Classes include students of mixed grade levels, grouped according to proficiency in language and subject matter. Curriculum materials were developed this year in Arabic and Chinese. Parents are involved through ongoing mail and telephone contacts, and workshops and conferences at the school. Evaluation of student achievement data indicate students met program objectives in English reading, mathematics, business/vocational courses and attendance. Objectives were not met for English language achievement. (MCK)

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FORT HAMILTON HIGH SCHOOL

PROJECT SPEED: SPECIAL

EDUCATION TO ELIMINATE DROPOUTS

1984-1985

OEA Evaluation Report

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O.E.A. Evaluation Section Report

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Grant Number: G00-820-2691

FORT HAMILTON HIGH SCHOOL

PROJECT SPEED: SPECIAL

EDUCATION TO ELIMINATE DROPOUTS

1984-1985

Principal:
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Director:
Mr. Robert Diaz

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A SUMMARY OF THE REPORT

Project SPEED, in its final year of a three-year funding cycle, provides instruction in English as a second language (E.S.L.) and native language arts (N.L.A.) in addition to bilingual instruction in mathematics, social studies, computer skills, and typing to 490 students of limited English proficiency (LEP) in grades nine through twelve. All program students were born outside the United States and were Spanish, Arabic, Chinese, Vietnamese, and Khmer speakers. Over 59 percent of the students served by Project SPEED were overage for their grade.

One of the major goals of the program is dropout prevention. In an effort to achieve this goal, the instructional approach stresses the development of English language skills. The language policy is aimed at helping students to make the transition to an all-English educational and career environment within two years. In keeping with this philosophy, individualized programs are planned for each student and classes are taught by both mainstream and resource teachers to heterogeneous language groups, except when homogeneous groups are more advantageous. Classes are composed of students from all grades, according to their proficiency in language as well as in subject matter.

Administrative, support services, and paraprofessional staff positions are funded by Title VII. A tax-levy bilingual history teacher serves the program part-time as a Spanish-speaking resource teacher. Supportive services to program students include program-centered activities, after-school group guidance sessions, career and college orientation, job placement counseling, referrals to outside agencies, and the involvement of outside agencies for counseling purposes.

Curriculum materials have been developed in Spanish for social studies and business, and in Chinese for computer instruction, science, and social studies. Developmental activities for staff members include staff meetings and in-house workshops. Parents of participating students are involved whenever possible, through ongoing mail and telephone contacts plus attendance at workshops and conferences held at the school. There is also an advisory committee which meets to address areas of need for program improvement.

Program objectives were assessed in English language development (Criterion Referenced English Syntax Test [CREST]); English reading ability (New York City Reading Test [P.S.E.N.]); content-area and special interest courses (teacher-made tests), and attendance (school and program records). Quantitative analysis of student achievement data indicates that:

--Students did not meet the objective proposed for English language achievement, however, they did master one CREST objective per month of E.S.L. instruction.

--Gains for students taking the New York City Reading Test were statistically significant, thus meeting the program objective.

--Overall passing rates in mathematics, science, and social studies courses exceeded 70 percent, thus meeting the program objective.

--Students' overall passing rates in business/vocational courses were 71 percent in the fall and 80 percent in the spring, thus meeting the program objective in the spring semester.

--The attendance rate of program students was significantly greater than the schoolwide rate and the dropout rate was significantly lower, thus meeting the program objective.

The following recommendations are aimed at improving the overall effectiveness of the program:

--incorporating more career development courses into the program;

--exchanging newly created Arabic and Chinese materials with other schools serving similar students;

--increasing parental involvement through education in U.S. customs and school- and career-related issues;

--increased individualization of instruction for students at both ends of the educational scale (gifted as well as remedial students); and

--increasing funding to expand the program's counseling component.

ACKNOWLEDGEMENTS

The production of this report, as of all O.E.A. Bilingual Education Evaluation Unit reports, is the result of a cooperative effort of permanent staff and consultants. In addition to those whose names appear on the cover, Margaret Scorza has reviewed and corrected reports, coordinated the editing and production process, and contributed to the quality of the work in innumerable ways. She has been assisted by Eulalia Cabrera who has interpreted findings and integrated material into reports, and by Ken Goodall who has edited the reports. Patricia Fitzpatrick has spent many hours creating, correcting, and maintaining data files. Finally, Joseph Rivera has worked intensively to produce, correct, duplicate, and disseminate reports. Without their able and faithful participation, the unit could not have handled such a large volume of work and still produced quality evaluation reports.

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FORT HAMILTON HIGH SCHOOL
PROJECT SPEED

Location:	8301 Shore Road Brooklyn, New York 11209
Year of Operation:	1984-85, final year of a three-year funding cycle
Target Languages:	Spanish, Arabic, and Chinese
Number of Participants:	490 students
Principal:	Diego Coscarelli
Project Director:	Robert Diaz

I. OVERVIEW

Fort Hamilton High School, the home of Program SPEED, is in the quiet Brooklyn neighborhood of Bay Ridge, not far from the Verrazano Narrows Bridge. The school's neat lawns, shady trees, and surrounding athletic facilities seem to make it inviting to any student. The library, the hallways, the cafeteria, the auditorium all reflect a secure, ordered, but relaxed atmoshere.

In 1984-85, the student population at Hamilton totaled 2,870: 1,411 were white, 860 Hispanic, 370 Asian, and 228 blacks. More than half -- 1,500 spoke a language other than English at home, and nearly 300 were limited English proficient (LEP) students (see Table 1).

TABLE 1

Home Languages of Fort Hamilton Students

Language	Number of Students	Number LEP
English	1,369	0
Arabic	98	31
Burmese	2	0
Cambodian	17	16
Chinese	194	78
Filipino (Tagalog)	27	1
French	22	4
Greek	127	7
Hindi	8	4
Italian	61	0
Korean	36	16
Laotian	4	4
Maliaylam	2	0
Norwegian	6	0
Persian	1	1
Polish	6	3
Russian	1	1
Spanish	859	88
Turkish	13	2
Urdu	5	5
Vietnamese	12	12
TOTAL	2,870	272

II. PARTICIPANTS

STUDENT CHARACTERISTICS

Students at Hamilton classified as LEP were eligible for the program. Additionally, any student of high school age residing in New York City who required bilingual education in Arabic could apply, and any high school student residing in Brooklyn who required bilingual education in Chinese could also apply. The Language Assessment Battery (LAB) was initially used to screen LEP students; students were also recommended for the program by classroom teachers based on their academic performance. Other data were also considered, including the student's birthplace, home language, school conduct, attendance records, and age.

In the spring semester, 490 students born outside the United States participated in the program. Forty-eight percent (234 students) were Hispanic, most of them from Puerto Rico and the Dominican Republic. Thirty-one percent (151 students) were Chinese: 129 were Cantonese-speaking students, the majority coming from mainland China and Hong Kong; the rest spoke Mandarin or a Chinese dialect. There were also seven students from Vietnam and three from Cambodia. The Arabic-speaking students numbered 89, most of them from Yemen, Lebanon, and Egypt. (See Table 2 for information on students' countries of birth.)

There was a slightly higher proportion of male students in the program (54 percent). Most of the students were in the ninth, tenth, and eleventh grades; only 17 percent of the students were twelfth graders. Over 50 percent of the project students were overage for their grade placement. The highest proportion of overage students were ninth

TABLE 2

Number and Percent of Program Students by
Language and Country of Birth

Language	Country of Birth	Number	Percent
Spanish	Puerto Rico	74	15
	Dominican Republic	70	14
	Ecuador	27	6
	Colombia	12	2
	El Salvador	12	2
	Panama	11	2
	Central and South America	28	6
Cantonese	People's Republic of China	95	19
	Hong Kong	29	6
	Other Asia	5	1
Mandarin	People's Republic of China	11	2
	Hong Kong	2	Less than 1
	Other Asia	5	1
Other Chinese Dialect	Hong Kong	4	Less than 1
Vietnamese	Vietnam	7	1
Khmer	Cambodia	3	Less than 1
Arabic	Lebanon	29	6
	Yemen	21	4
	Egypt	19	4
	Israel	10	2
	Greece	5	1
	Hong Kong	2	Less than 1
	Other Asia	3	Less than 1
Other Middle Eastern	Other Middle Eastern	6	1
	TOTAL	490	100

*Forty-eight percent of all program students are native speakers of Spanish. Almost one third of the students in this group were born in Puerto Rico. The next largest subgroup was born in the Dominican Republic.

*The second largest group of program students was born in Asia. A majority of students in this group are from the People's Republic of China and Hong Kong and are native speakers of Cantonese. This group also includes small numbers of students who are native speakers of other Chinese dialects, Mandarin, Vietnamese, and Khmer.

*The third group of students are reported to be Arabic speakers and were born in the Middle East. One third of these students were born in Lebanon. The remaining students are from Yemen, Egypt, Israel, and other Middle Eastern countries.

graders. The majority of students (71 percent) were in the program two years or less. Eighty-eight students (18 percent) had been in the program for three years; 168 students were new to the program in September, and 17 enrolled at different times during the year. (Tables 3 and 4 show the program students by age and grade, and the time students have spent in the bilingual program, by grade.)

STAFF CHARACTERISTICS

Project SPEED was supervised by the assistant principal for foreign languages. Title VII staff members were headed by the Spanish-speaking project director, who also served as a curriculum specialist, bilingual grade advisor, and guidance counselor. The staff included two resource teacher/curriculum specialists in Arabic and Chinese, and two educational assistants (paraprofessionals) in Spanish and Chinese. A bilingual secretary helped with telephone calls, mail, program activities, school activities, and parent workshops. A tax-levy bilingual history teacher has also been assigned to the program part-time as a Spanish-speaking resource teacher.

The tax-levy teaching staff included three full-time and three part-time teachers of English as a second language, three part-time teachers of native language arts, and a part-time bilingual typing teacher. More detailed information on staff characteristics can be found in Appendix A.

TABLE 3

Number of Program Students by Age and Grade

Age	Grade 9	Grade 10	Grade 11	Grade 12	Total
14	11	1	0	0	12
15	24	18	5	0	47
16	39	32	23	1	95
17	25	40	43	15	123
18	21	31	25	27	104
19	7	9	22	25	63
20	2	2	18	11	33
21	1	0	3	3	7
22	0	1	0	0	1
TOTAL	130	134	139	82	485
Overage Students					
Number	95	83	68	39	285
Percent	73	62	49	48	59

Note. Shaded boxes indicate expected age range for grade.

- Fifty-nine percent of the program students are overage for their grade.
- The percentage of overage students is highest in grade nine (73 percent) and decreases by grade.

TABLE 4

Time Spent in the Bilingual Program[a]

(As of June 1985)

Time Spent in Bilingual Program	Number of Students Grade 9	Grade 10	Grade 11	Grade 12	Total
<1 Academic Year	11	4	2	0	17
1 Academic Year	65	38	54	11	168
2 Academic Years	46	62	34	19	161
3 Academic Years	7	25	39	17	88
4 Academic Years[b]	2	5	6	32	45
5 Academic Years[b]	0	0	3	4	7
TOTAL	131	134	138	83	486

[a]Rounded to the nearest year.

[b]Reflects participation in prior bilingual program.

- The majority of the students (71 percent) have been in the program two years or less.
- Eighty-eight students (18 percent) have been in the program for three years.

III. INSTRUCTIONAL COMPONENT

The program's instructional policy was "transitional." It aimed to make the students' transition to all-English classes within two years.

Project SPEED students were enrolled in E.S.L. classes, bilingual content-area courses, and courses in their native languages. Each student had an individual program planned with the aid of the project director, who was responsible for placing them in required classes, and counseling them on elective courses. The resource teachers/curriculum specialists helped students who spoke Arabic and Chinese.

E.S.L. courses were offered in four double periods weekly at three levels of instruction: beginning, intermediate, and advanced. New arrivals were aided by paraprofessionals. Students were grouped on the basis of linguistic need and ability, which precluded placement by grade and age. Appendix B presents the E.S.L. course offerings in the fall and spring.

Several native language arts classes were offered in Spanish. However, Arabic and Chinese students were taught as needed on an individual pull-out basis, once or twice a week.

Those students not proficient in their native language or in English were given vocabulary in the native language, reinforcing basic concepts taught in the subject areas. To aid in this process, small group instruction and tutorials were given by the resource teachers and paraprofessionals in each of the target languages. Course offerings

in Spanish language arts are presented in Appendix C.

Content-area courses in American history and government, economics, and mathematics were taught bilingually or in Spanish. Bilingual computer instruction was also available, but only in Spanish. Typing classes previously taught in Spanish were taught mostly in English this year, with the help of a Spanish-speaking paraprofessional. Course offerings taught bilingually are presented in Appendix D. Specialized courses included woodshop, record keeping, and accounting, all taught in English.

The program as instituted followed its proposed plan closely. At least two mainstream classes were attended by all LEP students daily, thus giving them interaction with English-speaking pupils. As the students' E.S.L. levels improved, more were enrolled in mainstream mathematics, science, and social studies classes.

A member of the evaluation team observed a computer class and a typing class, both taught in English; an American government class taught in Chinese; an American history class taught in Spanish; a mathematics tutorial class taught in Arabic and English; and a Spanish language arts class.

The computer class included both Chinese and Hispanic students. After copying a computer program from the board, the students formed small groups for a hands-on demonstration of the program. A serious but relaxed atmosphere prevailed. The teacher reported high student interest and ability in the subject, especially among Oriental students. He complained of the excessive class size (32 students) and a lack

of materials. Some computers were stolen and had not yet been replaced.

The American government course was taught 60 percent in Chinese and 40 percent in English; the topic was the court system. As the lesson proceeded, the Chinese paraprofessional checked the previous day's homework and distributed handout sheets. The teacher and a student role played a courtroom scene, the student speaking Chinese and the teacher English. The students were extremely attentive.

Seventeen students were present for the American history class taught solely in Spanish. Its objective was the understanding of the laws of neutrality. The Spanish text was Historia del Pueblo de los E.E.U.U., recently translated. The majority of the students were new arrivals to the United States. The class was orderly and attentive, with students participating in class discussions, reading from the text, and writing on the blackboard. The course was geared toward passing the Citywide examination in this subject, which is now given in Spanish.

The tutorial mathematics class had seven Arabic students. The instructor worked with each student individually at the blackboard, had each repeat difficult terminology in English, and praised the students for correct responses.

In the language arts class taught completely in Spanish, 27 Hispanics were engaged in conjugating verbs and analyzing paragraph syntactically. The teacher checked the students' homework and instructed them to study for the final examination. The class was attentive and quiet; the teacher was well prepared.

V. NON-INSTRUCTIONAL COMPONENT

SUPPORT SERVICES

Guidance services were offered primarily by the project director, who had experience in guidance. When necessary, additional guidance services were offered by school personnel sensitive to students' needs.

The director is mostly responsible for the program's success in reaching students. He had a good rapport with LEP students, with his staff, and with all mainstream personnel interviewed by the evaluation team. In dealing with cases of students who had exhibited undesirable behavior, the director was straightforward and sincere, demonstrating an awareness of student, parent, and staff needs. His office represented a haven for students, where they felt they would be treated fairly. He knew the name of students in the program, their family situation, and any particular problems they had. His sense of humor were evident in observations made of his dealings with parents by telephone, with students in the hallways, and with mainstream staff members. Both the principal and the assistant principal praised the director's total dedication.

During the academic year, 167 students left the program (see Table 5). Seventy-four students graduated (17 had passed the High School Equivalency Examination), 28 students transferred to another school, 25 left the United States, and one was fully mainstreamed. Thirty-nine students (eight percent) dropped out of the program: 16

TABLE 5

Number of Students Leaving the Program

Reason For Leaving	Grade 9	Grade 10	Grade 11	Grade 12	Grade Unknown	Total
Fully mainstreamed	0	0	1	0	0	1
Transferred to another school	10	7	8	3	0	28
Left U.S.	9	6	8	1	1	25
Graduated	1	0	3	52	1	57
Dropped Out (Job)	8	3	4	1	0	16
Dropped Out (Marriage)	4	4	4	1	0	13
Dropout (Unknown)	5	0	5	0	0	10
Passed High School Equivalency	0	3	5	9	0	17
TOTAL	37	23	38	67	2	167

- Of 167 students who left the program, 67 (40 percent) were in grade twelve; of this number 52 graduated and nine obtained their high school equivalency diploma.

- Thirty-nine Twenty-six students dropped out of the program. Of this number 16 left for employment, 13 for marriage, and 10 for unknown reasons.

students left for employment; 13 left for marriage; and 10 left for unknown reasons. These figures indicate that the program has been relatively successful in retaining students and assisting them in completing graduation requirements.

In an interview, the project director stated that while the program was effective in providing support services and retaining students, he would like to see more students helped, particularly so that they may go to college. He said that more LEP students needed individual attention because they had problems with lunch passes, transportation cards, immigration matters, talking to teachers, and other day-to-day routines.

To facilitate LEP students' integration with the rest of the school population, they were placed in homeroom classes with non-LEP students. Additionally, all LEP students attended at least two mainstream classes daily and their progress was closely monitored by the program director.

CURRICULUM DEVELOPMENT

Curriculum development followed closely the New York State requirements. This year, the project made progress in the development of curriculum materials in Arabic and Chinese. Two resource teachers, one Arabic and one Chinese, were assigned most of their non-instructional time to translate and adapt materials in the native language, making them parallel to materials in English texts in mathematics, science, and social studies. Though rudimentary in presentation, these materials were in use and they served new LEP students well.

STAFF DEVELOPMENT

Staff development activities comprised attendance at workshops and conferences as well as enrollment in university courses. One paraprofessional completed college training and was serving as a fundamental mathematics teacher. He was also enrolled in a course at Jersey City State College. All resource teachers attended on-site workshops and conferences held. One Chinese paraprofessional attended the conference sponsored by the New York State Association for Bilingual Education. The project director attended workshops sponsored by the New York City Office of Bilingual Education.

In-house staff development included a presentation by an assistant principal attended by eight staff members. It dealt with examination formulation, lesson plans, homework review, discipline, and attendance. The principal also presented workshops on improving attendance, classroom management, student attitudes, and career orientation. These were attended by paraprofessionals and teachers.

PARENTAL INVOLVEMENT

Parental involvement, as in past years, continues to be low. However, much effort was expended by program teachers to gain parents' participation. They had parents sign homework on a regular basis and were quick to telephone parents at the first sign of students' problems or when absent. They tried to impress upon the parents that is was their right and duty to participate in school affairs whenever possible. However, the director thought that parents were not active in school affairs because they did not have a tradition of participating in school and neighborhood politics.

The program experienced some success in promoting the parent's acquisition of English. It assisted several parents to enroll in E.S.L. courses at Kingsborough Community College.

VI. FINDINGS

The evaluation findings for the 1984-85 academic year include the results of standardized tests, an examination of project material and records, on-site visits, and interviews with relevant personnel. In the areas of E.S.L. and native language arts, the project objectives were modified in consultation with the project director because data for the analyses originally proposed were not available.

ENGLISH AS A SECOND LANGUAGE

--Seventy-five percent of the students enrolled in E.S.L. classes will master ten more objectives on the posttest than on the pre-test.

The assessment instrument used to evaluate this objective was the Criterion Referenced English Syntax Test* (CREST). The CREST was developed by the New York City Public Schools to measure mastery of the syntax skills presented in the E.S.L. curriculum. The CREST uses four items to measure each skill, and mastery is achieved when three of the four items are answered correctly. The test has three levels: beginning (1), intermediate (2), and advanced (3). Levels 1 and 2 each measure mastery of 25 skills, while Level 3 measures mastery of 15 skills.

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*Extensive information on CREST syntax skills and psychometric properties are in the Technical Manual, New York City English as a Second Language Criterion Referenced English Syntax Test, Board of Education of the City of New York, Division of High Schools, 110 Livingston Street, Brooklyn, New York 11201.

The CREST was administered at the beginning and end of each semester. A mastery score to indicate gains was computed for each student by calculating the difference between pretest and posttest. The number of months of instruction between testings was computed for each student by multiplying the number of months between testings by the student's attendance rate. The number of skills mastered per month were calculated by dividing the mean mastery by the mean number of months of instruction between testings.

Many students who were pretested and posttested in the fall advanced to a higher CREST level in the spring. Because gains cannot be measured across different test levels, the analysis of student achievement was performed by semester.

In the fall, 64 percent of the students gained one CREST objective per month. In the spring, 40 percent of the students gained one CREST objective per month. Thus, the program did not meet its objective. It appears, however that the objective was not formulated appropriately. The citywide objective for Chapter I E.S.L. students in bilingual programs is an average mastery of one CREST objective per month of instruction. Had the program followed the citywide guidelines in formulating its objective for E.S.L., the program objective would have been reached (see Table 6).

TABLE 6

Results of the Criterion Referenced English Syntax Test

Test Level	Number of Students	PRETEST Mean	PRETEST S.D.	POSTTEST Mean	POSTTEST S.D.	MASTERY Mean	MASTERY S.D.	Mean Mastery Per Month
				FALL				
1	86	6.5	5.1	13.0	7.5	6.6	5.1	2.6
2	38	6.5	4.7	11.3	6.6	4.8	3.7	2.0
3	93	5.3	4.0	8.2	4.2	2.9	2.8	1.2
TOTAL	217	6.0	4.6	10.6	6.5	4.6	4.3	1.8
				SPRING				
1	30	5.6	5.2	10.7	6.1	5.1	4.8	1.4
2	70	6.6	5.9	11.3	6.6	4.7	3.7	1.4
3	77	6.0	3.8	8.4	3.8	2.4	2.4	0.7
TOTAL	177	6.2	4.9	10.0	5.6	3.8	3.6	1.1

.Overall, 1.8 CREST objectives were mastered per month in the fall, and 1.1 CREST objectives were mastered per month in the spring.

ENGLISH READING

--Students who remain in the high school equivalency preparation program for one year will increase their level of English reading ability at the .05 level of statistical significance.

The New York City Reading Test was used to assess students' achievement in this area. Raw scores were converted to Normal Curve Equivalent (N.C.E.) scores, which are normalized standard scores. They have the advantage of forming an equal interval scale so that scores and gains can be averaged. For the norming population, N.C.E.s have a mean of 50, a standard deviation of approximately 20, and a range from 1 to 99. Thus, scores can be compared to the norming population. Because N.C.E.s are based on the norm group's scores, students must gain at the same rate as the norm group to stay at the same N.C.E. Therefore, an N.C.E. gain, no matter how small, indicates improvement greater than that of the norm group, and a gain of 7 N.C.E. points has been considered exemplary in Chapter 1 programs.

Table 7 presents pre and post N.C.E. scores for all students taking the New York City Reading Test. The results show that there was a significant ($p.<05$) increase in posttest scores. Students gained an average of 24 N.C.E. points. Ninety-four percent of the students tested made actual gains. The number making significant gains includes students enrolled in the high school equivalency preparation program, thus, meeting the program objective.

TABLE 7

English Reading Achievement
Significance of Mean Normal Curve Equivalent Gains of Students
On the New York City Reading Test (P.S.E.N.)

Number of Students	PRETEST Mean	PRETEST S.D.	POSTTEST Mean	POSTTEST S.D.	GAIN Mean	GAIN S.D.	Proportion Making Gains
195	23.8	13.6	48.0	18.3	24.2*	18.4	94.0

*Statistically significant at the .0 level.

- Ninety-four percent of the students gained at least one N.C.E. point.
- Students pretested and posttested with this instrument made statistically significant gains, thus meeting the program objective.

MATHEMATICS, SCIENCE, SOCIAL STUDIES, AND BUSINESS/VOCATIONAL COURSES

--Seventy percent of the students enrolled in content-area courses will pass these subjects.

--Eighty percent of the students attending special interest classes will pass these subjects thus accumulating credits toward graduation.

Student performance in content-area courses and various electives was assessed in accordance with the above objectives. The passing rates in mathematics, science, and social studies were calculated (Table 8), and matched against the proposed criterion standard of 70 percent passing. The overall passing rates were 70 and 71.4 percent for the fall and spring respectively, thus meeting the proposed criterion. Passing rates increased from fall to spring in all content areas.

Students enrolled in business and vocational electives had passing rates of 70.5 percent in the fall and 79.8 percent in the spring. They reached the program objective of 80 percent passing special interest classes in the spring, but not in the fall semester.

TABLE 8

Passing Rates in Content-Area Subjects

Content Area	Fall		Spring		Total Overall Passing Rate
	Number of Students	Percent Passing	Number of Students	Percent Passing	
Mathematics	342	64.9	296	74.0	70
Science	238	64.3	210	75.2	70
Social Studies	349	67.3	302	75.5	71.4
Business/ Vocational	241	70.5	258	79.8	75

- Overall passing rates met the program objective in all content areas.
- Business/vocational courses had the highest passing rates each semester. However, these rates did not reach the 80 percent passing criterion set as the program objective.

ATTENDANCE AND DROPOUT

--Program students will have a higher rate of attendance and a significantly lower dropout rate than similar mainstream students.

Statistical significance between program and school attendance was determined through the application of a z-test for the significance of a proportion.* This procedure tests whether the difference between one proportion (the program's attendance) and a standard proportion (the school's attendance) is greater than what can be expected by chance variation.

The attendance rate for program students was 89.96 percent, 13 percentage points above the schoolwide attendance rate (77.18 percent). The z-test results ($z=6.58$) indicated that the difference in attendance rates is statistically significant ($p<.01$). The program objective was thus met.

Statistical significance of the difference between the school and program dropout rate was also detemined through a z-test for the significance of two proportions. The dropout rate for program students was 8 percent, 3.6 percentage points lower than the schoolwide dropout rate (11.6 percent). The z-test results ($z=-2.48$) indicated that the difference in dropout rates is statisticaly significant ($p.<05$), thus meeting the program objective.

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*Bruning, J.L. and Kintz, B.L., Computational Handbook of Statistics; Scott, Foresman, and Company, 1968.

VI. CONCLUSIONS AND RECOMMENDATIONS

CONCLUSIONS

The factors that hindered the full attainment of Project SPEED's goals were a lack of sufficient funding for additional support services, difficulties in finding qualified licensed personnel who are bilingual in Chinese and Arabic, and Title VII regulations which do not allow for the use of resource personnel as teachers. On the other hand, the factors that seemed to facilitate program progress were the following:

1) all program personnel became adept at their functions as they acquired more experience in dealing with foreign students and mainstream staff;

2) disciplinary problems among both program and mainstream students decreased as a result of the close contact the program director maintained with students as well as with their homes;

3) Fort Hamilton became the choice school to attend for Chinese students living in Brooklyn and Arabic students living in any of New York's five boroughs because of its reputation of being supportive of these students; and

4) the program and the students became totally integrated within the school as a whole.

Having achieved most of its original objectives for the general LEP student population, the program might now concentrate on individualizing instruction for its students who are classified as gifted and talented, and for those in need of remediation. Focusing its attention on these

special students could result in an increase in the number completing high school requirements among the remedial group and an increase in the number going to college among the gifted.

The project has been successful in meeting all of its major goals. It functioned effectively primarily as a consequence of its dedicated staff. To ensure its continued excellence and expansion, the program, would benefit from additional funding.

RECOMMENDATIONS

On the basis of this evaluation, the following recommendations are made:

--Because career development is a major concern of the program, more career development courses should be offered.

--As materials are developed in Arabic and Chinese, they could be exchanged with other schools producing materials for similar students. In this manner, more materials would be available, and resource personnel could dedicate less time to developing materials and more time to individual students.

--Increasing involvement of parents through education in U.S. customs concerning their participation in school activities and their children's career issues.

--Increased individualization of instruction for students who are gifted as well as those in need of remediation. This might increase college enrollment among the former and the possibility of obtaining the high school diploma among the latter.

--Additional funds would strengthen and increase the program's counseling component.

VIII. APPENDICES

APPENDIX A

Staff Characteristics

Function	Time Spent in Each Function	Education (Degrees)	Is Person Licensed or Certified for this Function?	Total Yrs. Experience Education	Years Experience Bilingual/E.S.L./ Foreign Language
Supervisor Bilingual Department	80	B.A. Spanish/Italian M.A. Spanish School Administrator and Supervisor	Yes	15 1/2	15 1/2
Project Director/Resource and Curriculum Specialist/Bil. Grade Advisor and Guidance Counselor	100	B.A. Spanish M.A. Supv. Administrator	Not Applicable	17	17
Bil. Dean/Bil. Computer Teacher	80	B.A. Spanish M.A. Supv. Administrator	Not Applicable	22	22
Bil. Attendance Coordinator/Bil. Spanish Social St. Teacher	100	B.A. Spanish M.A. Education	Not Applicable	15	15
Resource and Curriculum Specialist Arabic	100	B.S. (Science and Education)	Not Applicable	28	28
Resource and Curriculum Specialist Chinese	100	B.A. Chinese M.A. Chinese Bil. Ed.	Yes	13	13
Paraprof. Spanish	100	6 college credits	Yes	7	7

APPENDIX A

Staff Characteristics (continued)

Paraprof. Chinese	100	B.A., M.A. Education	Yes	2 1/2	2 1/2
Bilingual Secretary	100	48 college credits 12 in-service credits	Yes	3	16
Teacher E.S.L.	100	B.A. History	No	2	1 1/2
Teacher E.S.L.	100	B.A. English	Yes	28	28
Teacher E.S.L.	100	B.A. M.A. French	Yes	16 1/2	16 1/2
Teacher E.S.L.	40	B.A. M.A. History	No	3	3
Teacher E.S.L.	40	B.A. French	No	2	2
Teacher E.S.L.	40	B.A. M.A. French	Yes	17	17
Span. Native Language Arts Teacher	60	M.A. plus 30 credits	Yes	12	12
Span. Native Language Arts Teacher/Span. Math	80	M.A. plus 15 credits	Yes	6	6
Span. Native Language Arts Teacher	40	B.A. M.A. Spanish M.A. Education M.A. Supv. and Administrator	Yes	26	26
Bil. Typing Teacher	20	B.A. M.A. Business	Yes	16	3

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APPENDIX B

Offerings in English as a Second Language (Fall)

Course Title and Level	Number of Classes	Number Taught Out of License	Total Register	Title VII Register
E.S.L. 1	5	2	87	82
E.S.L. 2	5	1	125	118
E.S.L. 3	5	0	112	107
E.S.L. 4	4	0	110	96
Remedial 1	3	0	68	12
Remedial 2	2	0	51	4
Remedial 3	2	0	59	28
Remedial 4	2	0	53	24
Remedial 5	3	0	76	48
Remedial 6	2	0	53	17
Remedial 7	3	0	103	49
Remedial 8	1	0	33	12

APPENDIX B

Offerings in English as a Second Language (Spring)

Course Title and Level	Number of Classes	Number Taught Out of License	Total Register	Title VII Register
E.S.L. 1	6	3	79	74
E.S.L. 2	9	3	171	162
E.S.L. 3	7	4	135	129
E.S.L. 4	6	0	91	81
Remedial 1	2	0	52	2
Remedial 2	2	0	43	8
Remedial 3	2	0	37	9
Remedial 4	3	0	101	36
Remedial 5	2	0	46	23
Remedial 6	3	0	86	45
Remedial 7	1	0	30	15
Remedial 8	3	0	79	37

APPENDIX C

Offerings in Spanish Language Arts (Fall)

Course Title and Level	Number of Classes	Total Register	Title VII Register
Spanish For Native Speakers 3	3	99	96
Spanish For Native Speakers 5	2	43	40
Spanish Language Arts 1	11	302	2
Spanish Language Arts 3	9	252	1
Spanish Language Arts 5	8	398	3
Spanish Language Arts 7	3	72	6
Spanish Language Arts 9	1	21	7
Spanish Language Arts 11	1	27	4

(Spring)

Spanish For Native Speakers 4	4	83	81
Spanish For Native Speakers 6	1	31	30
Spanish Language Arts 2	10	279	2
Spanish Language Arts 4	8	214	1
Spanish Language Arts 6	7	289	3
Spanish Language Arts 8	3	65	6
Spanish Language Arts 10	1	17	7
Spanish Language Arts 12	1	25	4

APPENDIX D

Bilingual Course Offerings in Subject Areas (Fall)

Course Title and Level	Number of Classes	Number Taught Out of License	Total Register	Title VII Register
Spanish Bilingual American History	1	0	41	10
Spanish Bil. Economics	1	0	44	10
Bilingual Typing	1	0	29	90
Bilingual Computer	1	1	31	90
Span. Fundamental Math	1	1	35	10

(Spring)

Span. American Studies 2	2	1	40	20
Spanish American Gov. 1	2	0	42	20
Bilingual Typing 2	1	1	32	80
Bilingual Computer 1	1	0	32	80
Span. Fundamental Math 3	2	2	40	10